

but not in contact with it, all those who were sensitive to the magnet felt either a cool or a warm aura; and that generally more distinctly than in the case of a crystal. Indeed many healthy persons were sensitive to this influence; amongst others, M. Schuh, M. Studer, and M. Kotschy, the African traveler, all healthy vigorous men, the latter a rare specimen of manly vigour and hardy constitution. We have only space for the general conclusions of this section, which are—

1. That the hand, passed over sensitive patients, acts on them like the poles of crystals.

2. That the power which here acts is conductible through all bodies like the force of crystals, and that it likewise resembles this force in its capability of being collected in other bodies, and in its disappearance from those bodies in a short time.

3. That this force is polarized in the human body, as the other is in crystals, and that both are alike uninfluenced by the earth's magnetism.

4. That this force exercises a mechanical attraction on the hands of cataleptics, as does the force of crystals.

5. That this force exhibits beautiful luminous phenomena, visible to the sensitive, of the same kind and strength as those exhibited by the force of crystals. The author promises to give drawings of these beautiful appearances with a future memoir. It is worthy of remark that Professor Gregory, two years ago, and consequently long before he had heard of Reichenbach's observations, often saw a lad who in the mesmeric state observed flames issuing from the point of his (the Professor's) fingers.

In section 4 are considered further sources of the new power; the sun's rays are shown by some beautiful experiments to yield it, and that moonlight, although it conveys no heat, possesses a powerful hidden influence similar to that which resides in crystals, magnets, the human hand, and the sun's rays. Heat, friction, and artificial light are other sources of it.

The most important points of section 5 are the following:

1. Chemical action as well the ordinary kind as that connected with combustion and the galvanic pile, is a comprehensive source of the magneto-crystalline force.

2. The most insignificant chemical action is sufficient to develop it abundantly, to charge surrounding objects with it, to exhibit polarity, to produce light, &c.

3. The magnetic baguet of Mesmer and his followers most probably developed this force in consequence of chemical action.

4. Digestion and respiration, and, in general, the change of matter in the animal body, being chemical processes, are the sources of the magnetic influence which exists and acts in the human frame.

5. The ghost-like luminous appearances that have been observed above graves, although unseen by most healthy persons, do really exist, are of a purely physico-chemical nature, but can only be seen by the highly sensitive.

6. Electricity is also a source of the power which resides in crystals, &c. This is true both of friction-electricity, positive and negative, and of contact-electricity, and even the electric atmosphere is capable of setting this force in motion at considerable distances.

In the remainder of the memoir he shows that all bodies in some degree contain the new force; that they cause heat and cold, and are luminous to the sensitive, but that the light is variously coloured; that the amount of the new force in the hand varies at different hours; and finally, in what manner the foregoing facts may be applied to the preservation of the health.

These supposed discoveries have excited vast interest in Europe, as is shown by the extent to which they have been quoted and reviewed in various journals. Some respectable reviewers have even thought them worthy of credit, and those even who were very justly skeptical, have at least thought them entitled to consideration and examination. Mr. Braid has repeated many of them, and the results of his experiments will be found in the succeeding article.

102. *The Power of the Mind over the Body: An Experimental Inquiry into the Nature and Cause of the Phenomena attributed by Baron Reichenbach and others to a "New Imponderable."* By JAMES BRAID, M. R. C. S. E., &c. &c. (Edinburgh Med. and Surg.

Journal, Oct. 1846.)—The preceding article contains an account of the wonderful, supposed, new discoveries of Baron Reichenbach, and in the present will be found the results obtained by Mr. Braid, on repeating the experiments of the former. This paper cannot fail to be read with deep interest. So curious and important does it seem to us, that we have not hesitated to give it nearly *in extenso*, and to appropriate to it far more space than is accorded to articles in this department of the *Journal*. It is one of the most valuable contributions to mental physiology and pathology that has for a long time been presented.

"On the first announcement," says Mr. Braid, "of Dr. Gregory's abstract of Baron Reichenbach's 'Researches on Magnetism,' I lost no time in procuring a copy, which I perused with intense interest. I had not proceeded far, however, when my experience with hypnotic patients enabled me to perceive a source of fallacy, of which the Baron must either have been ignorant, or which he had entirely overlooked. From whatever cause this oversight had arisen, I felt confident that, however carefully and perseveringly he had prosecuted his experiments, and however well calculated they had been for determining mere physical facts, still no reliance could be placed upon the accuracy of conclusions drawn from premises assumed as true, where especial care had not been taken to guard against the source of fallacy to which I refer, viz., the important influence of the mental part of the process, which is in active operation with patients during such experiments.* I therefore resolved to repeat his experiments, paying the strictest attention to this point; and, as I had anticipated, the results were quite opposed to the

* Let it not be supposed that I intend, by these observations, to impute to Baron Reichenbach any want of ordinary caution, or even the strictest desire to guard against sources of fallacy of every sort. From what is recorded at pp 13. 50, and 81, of the "Abstract," it is obvious that he had taken great precautions, and such, indeed, as would have been quite adequate to effect such purpose under ordinary circumstances. Moreover, I most cordially admit that a better devised series of experiments, or a more laborious and painstaking effort, for determining the question on strictly inductive principles, I have never met with in any department of science. Nor is small praise due to Professor Gregory for the masterly manner in which he has performed his part of the task; still, when the extraordinary acuteness of the organs of special sense are taken into account, to which reference is made at p. 2 of the "Abstract," where it is admitted that "smell and taste become astonishingly delicate and acute;" vision so irritable that patients "are able, in very dark rooms, to distinguish not only the outlines, but also the colours of objects where healthy people cannot distinguish anything at all;" and that "patients hear and understand what is spoken three or four rooms off;" I say, when these facts are taken into consideration, coupled with the excitable state of their minds, it will readily be admitted, that with all the precautions resorted to by Baron Reichenbach, various ideas may have been conveyed to his secluded patients, through the ordinary channels, of which he had no suspicion. For example, slight sounds in conducting the experiments, may have been overheard by the patients, and indicated to them changes in the arrangements, of which the operator had no notion; tones of voice, in proposing questions, may have had an equally certain and unintended influence; and it is an undoubted fact that, with such subjects, the slightest change in the concomitants always suggests a change in the fundamental or previously existing idea. Such being the case, I can imagine no satisfactory mode of determining the subject with such patients as the Baron experimented with in the staircase, but having them placed beyond the range of hearing, even to their quickened ears. The conducting wires should be securely fixed by thumb-screws near their distal ends, so as to prevent any vibration taking place beyond, when changing arrangements; which should be performed with the least possible noise; and a single sound of a bell should be the only signal for an answer, unless the patient should wish voluntarily to express some intelligence as to impressions, which he ought to be at liberty to do at any time. I would also suggest that there ought to be no regular order in the experiments; and that changes should be made without sounding the bell; and occasionally, that the bell should be sounded repeatedly without any change having been made. On no account should the experiments be conducted where the patients can have ocular observation of the features or gestures of the investigators, even in apartments apparently dark. Such are the rigorous conditions I should consider requisite in the investigations of this subject, so as to guard against all obvious sources of fallacy.

conclusions of Baron Reichenbach. It is with considerable diffidence that I venture to publish an opinion opposed to such high authority; but I shall briefly state the grounds of my own belief, and leave it to others to repeat the experiments, and determine which opinion is nearer the truth. The observations which I have to submit may, moreover, prove suggestive to others, and enable them not only to avoid sources of fallacy with which I am familiar, but may also lead to the detection of many which may have escaped my own observation.

"The great aim of Baron Reichenbach's researches in this department of science has been to establish the existence of a new imponderable, and to determine its qualities and powers in reference to matter and other forces, vital and inanimate. It unfortunately happens, however, that the only test of this alleged new force (with one solitary exception, and that as I thought by no means a satisfactory one), is the human nerve; and not only so, but it is further admitted that its existence can only be demonstrated by certain impressions imparted to, or experienced by, a comparatively small number of highly sensitive and nervous subjects.* But it is an undoubted fact that with many individuals, and especially of the highly nervous, and imaginative, and abstractive classes, a strong direction of consciousness to any part of the body, especially if attended with the expectation or belief of something being about to happen, is quite sufficient to change the physical action of the part, and to produce such impressions from this cause alone, as Baron Reichenbach attributes to his new force. Thus every variety of feeling may be excited from an internal or mental cause—such as heat or cold, pricking, creeping, tingling, spasmodic twitching of muscles, catalepsy, a feeling of attraction or repulsion, sights of every form or hue, odours, tastes, and sounds, in endless variety, and so on, according as accident or intention may have suggested. Moreover, the oftener such impressions have been excited, the more readily may they be reproduced, under similar circumstances, through the laws of association and habit. Such being the fact, it must consequently be obvious to every intelligent and unprejudiced person, that no implicit reliance can be placed on the human nerve, as a test of this new power in producing effects from external impressions or influences, when precisely the same phenomena may arise from an internal or mental influence, when no external agency whatever is in operation.

"In order to guard against this source of fallacy, therefore, I considered it would be the best mode to throw patients into the nervous sleep, (the term adopted by me in preference to mesmeric sleep, for reasons to be explained presently,) and then operate on such of them as I knew had no use of their eyes during the sleep (for some patients have), and to take accurate notice of the results when a magnet capable of lifting fourteen pounds was drawn over the hand and other parts of the body without contact, after the manner described as performed by Baron Reichenbach in his experiments.

"I experimented accordingly, and the results were, that in no instance was there the slightest effect manifested, unless when the magnet was brought so near as to enable the patient to feel the abstraction of heat (producing a sensation of cold), when a feeling of discomfort was manifested, with a disposition to move the hand, or head, or face, as the case might be, from the offending cause. This indication was precisely the same when the armature was attached, as when the magnet was open: and in both cases, if I suffered the magnet to touch the patient, instantly the part was hurriedly withdrawn, as I have always seen manifested during the primary stage of hypnotism, when the patients were touched with any cold object. Now, inasmuch as patients in this condition, generally, if not always, manifest their perceptions of external impressions by the most natural movements, unless the natural law has been subverted by some preconceived notion or suggested idea to the contrary: and as I have operated with similar results upon a considerable number of patients, we have thus satisfactory proof that there was no real attractive power, of a magnetic or other nature, tending to draw the

* Such, at least, appeared to be the conviction as set forth in the *Abstract*. I soon ascertained, however, that, as respects common sensation in particular, many of the phenomena could be readily demonstrated even in healthy persons,—but on principles admitting of a totally different explanation from that of Baron Reichenbach, as shall be presently illustrated and proved.

patient, or any of his members, so as to cause an adhesion between his body and the magnet, as between the latter and iron, as Baron Reichenbach had alleged. I conclude, therefore, that the phenomena of apparent attraction manifested in his cases were due entirely to a mental influence; and I shall presently prove that this is quite adequate to the production of such effects. * * *

"In prosecuting the inquiry, Baron Reichenbach considered he had not only proved the existence of this new force, which produced all the physical effects enumerated, with streams of light from the poles, and the power of attracting the human body, and adhering to it, as steel to the magnet—I say he alleged that he had established such a force, not only as residing in the magnet, in addition to the ordinary magnetic force, but moreover, that it was found equally active in crystals, where it existed quite pure and distinct from ordinary magnetism. He also now ascertained that his subjects could discover "that from the finger points of healthy men, fiery bundles of light streamed forth. exactly as from the poles of magnets and crystals visible to the sensitive. He alleges, moreover, that he had proved that where it was passive, it could be excited into activity by the sun's rays, by the moon's rays, by starlight, by heat, by chemical or mechanical action, and finally, that this luminous or phosphorescent appearance, and certain other peculiar properties, might be discovered by the highly sensitive in almost every place, and from nearly every object or form of matter, solid or fluid, animate or inanimate. Also, that it could be conducted through all other matter, and that all substances, not naturally actively charged with it, could be so temporarily, by proximity and contact of those which were actively charged.

"I have already stated the wonderful power of the human mind, when consciousness is strongly directed to any part of a sensitive person, in changing physical action, and leading the subject to attribute to an external cause what may have arisen entirely from an internal or mental cause. It has also been stated that, when I resorted to a mode of operating which rendered the subjects more highly sensitive to external influences, and at the same time was calculated to obviate any source of fallacy, as to mental emotion or expectation being directed to the part from their seeing what was being done, the results were in direct opposition to what was represented as having been realized by the Baron. I have particularly adverted to this in respect to the alleged attraction of the magnet for the human frame; I have proved it to be equally so in respect to the human hand, and crystals, &c., where all sources of fallacy are guarded against. In my experience, moreover, with such cases, no light or flames have been perceived by patients either from the poles of a magnet, crystals, the points of the fingers, or other substance, unless the patients have been previously penetrated with some idea of the sort, or have been plied with such questions as were calculated to excite motions, when various answers were given accordingly, and when in the sleep, there appeared an equal aptitude to see something when neither magnet nor fingers were in the direction indicated, as when they were—a clear proof that the impressions were entirely imaginary, or mental in their origin.

"I shall now proceed to detail the results of experiments with patients when wide awake, and when they had an opportunity of seeing what was being done, and expected something to happen; and also when the same patients saw nothing of what was doing, but supposed I was operating, and consequently expected something to occur.

"With nearly all the patients I have tried, many of whom had never been hypnotized* or mesmerised, when drawing the magnet or other object slowly

* "*Hypnotized* is the term adopted by me to designate the state of *nervous sleep* induced by my usual processes. I commenced my experimental investigation of mesmerism as a decided skeptic; but when I had fully satisfied myself of the reality and peculiarity of the condition,—that they did not depend upon the transmission from the operator to the patient of any magnetic or special influence, as alleged by the mesmerists,—that the power was capable of being turned to important purposes in the relief and cure of disease; and when I had, moreover, ascertained that the phenomena producible by my processes did not include the *higher* phenomena, as they are called, of the mesmerists, such as clairvoyance, seeing through opaque bodies, mesmeric intuition, transposition of the senses, &c. &c., I deemed it prudent to adopt

from the wrist to the points of the fingers, various effects were realized, such as a change of temperature, tingling, creeping, pricking, spasmodic twitching, catalepsy of the fingers, or arm, or both; and reversing the motion was generally followed by a change of symptoms, from the altered current of ideas thereby suggested. Moreover, if any idea of what might be expected existed in the mind previously, or was suggested orally, during the process, it was generally very speedily realized. The above patients being now requested to look aside, or a screen having been interposed, so as to prevent their seeing what was being done, and they were requested to describe their sensations during the repetition of the processes, similar phenomena were stated to be realized, even when there was nothing whatever done, beyond watching them, and noting their responses. They believed the processes were being repeated, and had their minds directed to the part, and thus the physical action was excited, so as actually to lead them to believe and describe their feelings as arising from external impressions.

"The above fact was most remarkably evinced in a young gentleman, twenty-one years of age. I first operated in this manner on his right hand, by drawing a powerful horse-shoe magnet over the hand, without contact, whilst the armature was attached. He immediately observed a sensation of cold follow the course of the magnet. I reversed the passes, and he felt it less cold, but he felt no attraction between his hand and the magnet. I then removed the cross-bar, and tried the effect with both poles alternately, but still there was no change in the effect, and decidedly no proof of attraction between his hand and the magnet. In the afternoon of the same day I desired him to look aside and hold his hat between his eyes and his hand, and observe the effects when I operated on him, whilst he could not see my proceedings. He very soon described a recurrence of the same sort of sensations as those he felt in the morning, but they speedily became more intense and extended up the arm, producing rigidity of the member. In the course of two minutes this feeling attacked the other arm, and to some extent the whole body, and he was, moreover, seized with a fit of involuntary laughter, like that of hysteria, which continued for several minutes—in fact, until I put an end to the experiment. His first remark was, 'Now this experiment clearly proves that there must be some intimate connection between mineral magnetism and mesmerism, for I was most strangely affected, and could not possibly resist laughing during the extraordinary sensations with which my whole body was seized, as you drew the magnet over my hand and arm.' I replied that I drew a very different conclusion from the experiments, as I had never used the magnet at all, nor held it, nor anything else, near to him: and that the whole proved the truth of

such conventional terms as might enable me to express my own views and convictions to the profession and the public, without being confounded with those who believed in, and contended for, all the extreme views of the mesmerists. I hoped thus to insure for the *ordinary and practically useful phenomena, a patient investigation*, which had been refused to those who contended for extreme views, respecting phenomena of rare occurrence and doubtful character. I therefore adopted the conventional term "Neuro-Hypnotism," or, for the sake of brevity, simply "Hypnotism, or Nervous Sleep," to designate a peculiar condition of the nervous system, into which it can be thrown by artificial contrivance, different in several respects from common sleep, or the ordinary waking condition. Strictly speaking, it comprises not *one state*, but a *series of stages*, varying in every conceivable degree, from mere reverie to profound nervous coma, with entire abolition of consciousness, and voluntary power on the one hand, to an almost incredible exaltation of function of the organs of special sense, and of intellectual and voluntary power, on the other. The phenomena are partly mental and partly physical,—voluntary, involuntary, or mixed, according to the stage of the sleep. There is also as great difference in the susceptibility to the hypnotic impression, as there are differences in the mental and physical constitution of the nature of the patients submitted to the processes. Some become rapidly and intensely affected, others slowly and feebly so. Such being the facts of the case, it must be obvious that no one can be at all qualified for testing such patients, who is not quite familiar with these peculiarities. He will, otherwise, be continually liable to suspect that he detects discrepancies, which arise entirely out of his own imperfect knowledge of the subject, leading him to mistake the phenomena of one stage for those which belong to another.

my position as to the extraordinary power of the mind over the body, and how mental impressions could change physical action.

"I operated on two other gentlemen the same day, who were much older, and with decidedly marked effects in both, though less so than in the last case. The experiment being tried with a lady of fifty-six years of age, by drawing a gold pencil-case slowly from the wrist to the finger ends, a creeping, twitching sensation was felt, which increased until it became very unpleasant, and excited a drawing, crampy feeling in the fingers of that hand. On causing her to look aside, watch, and describe her feelings during my subsequent operations, the results were similar, and that whilst I had done nothing; and the whole, therefore, was attributable to the power of the mind in changing the physical action.

"Another interesting case of a married lady, was tested in presence of her husband, as follows. I requested her to place her hand on the table, with the palm upwards, so situated as to enable her to observe the process I was about to resort to. I had previously remarked, that by my drawing something slowly over the hand, without contact, whilst the patient concentrated her attention on the process, that she would experience some peculiar sensations in consequence. I took a pair of her scissors, and drew the bowl of the handle slowly from the wrist downwards. I had only done so a few times, when she felt a creeping, chilly sensation, which was immediately followed by a spasmodic twitching of the muscles, so as to toss the hand from the table, as the members of a prepared frog are agitated when galvanized. I next desired her to place her other hand on the table, in like manner, but placed so, that by turning her head in the opposite direction, she might not see what was being done, and to watch her sensations in that hand, and tell us the result. In about the same length of time, similar phenomena were manifested, as with the other hand, although in this instance I had done nothing whatever, and was not near her hand. I now desired her to watch what happened to her hand, when I predicted that she would feel it become cold, and the result was as predicted, and vice versa, predicting that she would feel it become intensely hot, such was realized. When I desired her to think of the tip of her nose, the predicted result, either of heat or cold, was speedily realized in that part.

"Another lady, twenty-eight years of age, being operated on in the same manner, whilst looking at my proceedings, in the course of half a minute, described the sensation as that of the blood rushing into the fingers; and when the motion of my pencil-case was from below, upwards, the sensation was that of the current of blood being reversed, but less rapid in its motion. On resuming the downward direction, the original feeling recurred, still more powerfully than at first. This lady being requested now to look aside, whilst I operated, realized similar sensations, and that whilst I was doing nothing.

"The husband of this lady, twenty-eight and a half years of age, came into the room, shortly after the above experiment was finished. She was very desirous of my trying the effect upon him, as he was in perfect health. I requested him to extend his right arm laterally, and let it rest on a chair with the palm upwards, to turn his head in the opposite direction, so that he might not see what I was doing, and to concentrate his attention on the feelings which might arise during my process. In about half a minute he felt an aura like a breath of air passing along the hand; in a little after, a slight pricking, and presently a feeling passed along the arm, as far as the elbow, which he described as similar to that of being slightly electrified. All this occurred while I had been doing nothing, beyond watching what might be realized. I then desired him to tell me what he felt now,—speaking in such a tone of voice as was calculated to lead him to believe I was operating in some different manner. The result was that the former sensations ceased; but, when I requested him once more to tell me what he felt now, the former sensations recurred. I then whispered to his wife, but in a tone sufficiently loud to be overheard by him, observe now, and you will find his fingers begin to draw, and his hand will become clenched,—see how the little finger begins to move, and such was the case; see the next one also going in like manner, and such effects followed; and finally, the entire hand closed firmly, with a very unpleasant drawing motion of the whole flexor muscles of the forearm. I did nothing whatever to this patient until the fingers were nearly closed, when I touched the palm

of his hand with the point of my finger, which caused it to close more rapidly and firmly. After it had remained so for a short time, I blew upon the hand, which dissipated the previously existing mental impression, and instantly the hand became relaxed. The high respectability and intelligence of this gentleman rendered his testimony very valuable; and especially so, as he was not only wide awake, but had never been either mesmerized, hypnotized, or so tested before.

"Another gentleman, twenty-one years of age, was tried by drawing a gold pencil-case along the palm of the hand, without contact. At the fourth traction, he looking at the part and my process, he described a cold aura following the course of the pencil, then a pricking, and after a few more courses, he described it as rather a warm pricking sensation; such as that experienced from the sun's rays concentrated on the skin by a lens. By reversing the passes, from the points of the fingers towards the wrist, the aura was changed, and he described the sensation as that of forcing back the blood in the veins, when they are much distended. I then proposed to experiment on his other hand, whilst his head was held aside, when similar sensations were realized, although on this occasion I had done nothing,—the whole results having arisen from his own concentration of consciousness, changing the physical action of the part, and recalling his former association of ideas in reference to the other hand. I thereupon explained to him the law (for he was a very acute young gentleman), which seemed to obtain in the production of such phenomena, and desired him to satisfy himself of the fact, by concentrating his attention on the upper part of his foot, and watching the result. Here, also, he experienced similar sensations to arise, even whilst he was aware that I was doing nothing; but the effects took place less rapidly than was the case in the former experiments with his hands. It is also worthy of remark, that this gentleman experienced very severe headache to result from these experiments, which, however, I was enabled very speedily to remove by another process.

"A lady, thirty years of age, was requested to hold out her right hand over the arm of an easy chair, whilst she turned her head to the left, to prevent her from seeing what I was doing, and to watch and describe to me the feelings she experienced in the hand during my process, which was to be performed without contact. She very soon felt a pricking in the point of the third finger, which increased in intensity, and at length extended up the arm. I then asked her how her thumb felt, and presently the same feeling was transferred to it; and when asked to attend to the middle of the forearm, in like manner the feeling was presently perceived there. All the time I had been doing nothing; the whole was the result of her own mind acting on her hand and arm. I now took the large magnet, and allowed her to watch me drawing it slowly over the hand, when the feeling was much as before, only that she felt the cold from the steel when brought very near to the skin. It was precisely the same when closed as when opened, and the same sensations occurred when the north pole alone was approximated, or the south alone, or both together. She experienced no sense of attraction between her hand and the magnet from either pole, nor from both combined. I now requested this lady to keep a steady gaze upon the poles of the large horse-shoe magnet, and tell me if she saw anything, (the room was not darkened nor was the light strong,) but nothing was visible. I then told her to look steadily, and she would see flame or fire come out of the poles. In a little after this announcement she started, and said, 'Now I see it, it is red; how strange my eyes feel;' and instantly she passed into the hypnotic state. This lady had been repeatedly hypnotized. I now took the opportunity of testing her as to the alleged power of the magnet to attract her hand when asleep, but, as in the other cases, the results were quite the contrary—the cold of the magnet (and of either pole alike) caused her to withdraw her hand the moment it touched her. I now requested her to tell me what she saw (she being still in the sleep). She said she still saw the red light. I desired her to put her finger to the place where she saw it. This she declined to do, being afraid that it would burn her. I thereupon assured her that it would not burn her, upon which she pointed to the same place where the magnet was held before she went into the sleep, instead of to where it was now held, which was near to her face, but towards the opposite side of the chair. This lady does not see from under her partially closed eyelids when hypnotized, as some

patients do; and the evidence her testimony affords in support of my opinion upon this subject, is very conclusive, as she is a lady of very superior mental attainments, and one whose testimony merits unlimited confidence.

"I beg to call particular attention to the fact, that in this latter case, as with the fifth of the vigilant cases narrated, the first experiments were tried without any magnet or other object being pointed at or drawn over them, and still the mental influence was quite sufficient to change the physical action and produce decided and characteristic effects, where there could be no influence from without, of the nature alleged by Baron Reichenbach and the mesmerists.

"A lady, upwards of fifty-six years of age, in perfect health, and wide awake, having been taken into a dark closet, and desired to look at the poles of the powerful horseshoe magnet of nine elements, and describe what she saw, declared, after looking a considerable time, that she saw nothing. However, after I told her to look attentively, and she would see fire come out of it, she speedily saw sparks, and presently it seemed to her to burst forth, as she had witnessed an artificial representation of the volcano of Mount Vesuvius at some public gardens. Without her knowledge, I closed down the lid of the trunk which contained the magnet, but still the same appearances were described as visible. By putting leading questions, and asking her to describe what she saw from another part of the closet, (where there was nothing but bare walls,) she went on describing various shades of most brilliant coruscations and flame, according to the leading questions I had put for the purpose of changing the fundamental ideas. On repeating the experiments, similar results were repeatedly realized by this patient. On taking this lady into the said closet after the magnet had been removed to another part of the house, she still perceived the same visible appearances of light and flame when there was nothing but the bare walls to produce them: and, two weeks after the magnet was removed, when she went into the closet by herself, the mere association of ideas was sufficient to cause her to realize a visible representation of the same light and flames. Indeed such had been the case with her on entering the closet ever since the first few times she saw the light and flames. In like manner, when she was made to touch the poles of the magnet when wide awake, no manifestations of attraction took place between her hand and the magnet, but the moment the idea was suggested that she would be held fast by its powerful attraction, so that she would be utterly unable to separate her hands from it, such result was realized; and, on separating it, by the suggestion of a new idea, and causing her to touch the other pole in like manner, predicting that it would exert no attractive power for the fingers or hand, such negative effects were at once manifested. I know this lady was incapable of trying to deceive myself, or others present; but she was self-deceived and spell-bound by the predominance of a preconceived idea, and was not less surprised at the varying powers of the instrument than others who witnessed the results.

"Similar phenomena were manifested by this patient when she was requested to place a finger or hand in contact with a table, or any other inanimate object;—the results being either negative, or irresistibly attractive, or repulsive, according to the ideas suggested; and that without any passes or manipulations on any part. Moreover, these results occurred whilst I was willing the very opposite effects might arise from those she had heard me predict. The results always corresponded with the mental impression or belief of the patient, and might have been just as readily suggested by a pass or silent signal, to which she had attached a particular idea, as by vocal enunciation.

"In like manner several other patients whom I took into the dark closet, could see nothing, until told to look steadily at a certain point and they would see flame and light of varying colours, proceeding from it, which predictions were speedily realized, whilst they were wide awake, and with nothing but bare walls towards which to direct their eyes. Not only so, but I have, moreover, ascertained, that, even in broad day-light, a strong mental impression is adequate to produce such delusions with certain individuals of a highly imaginative and concentrative turn of mind. This fact was beautifully illustrated in the case of a gentleman, twenty-four years of age, (who had suffered severely from epilepsy, for eleven years, notwithstanding the persevering use of medicine of various sorts, prescribed by many of the most able members of the profession, but who is recovering very

satisfactorily under the hypnotic treatment.) when taken into the above closet and tested as the latter. He likewise saw nothing till I suggested that he would see flame and light, after which prediction he very speedily saw them accordingly, not merely where the magnet was, but also from other parts of the apartment. Now, this patient, and the last two referred to, when taken into the closet after the magnet had been a long time removed to a distant part of the house, still saw the flames, and changing colours as before—a clear proof that the whole was a mental delusion arising from an excited imagination, on the point under consideration, changing physical action. The same gentleman being made to look at the point of a piece of brass wire, could be made to imagine that he saw any sort of flame or colour indicated issuing from it, even in broad day-light; and when made to touch it with a finger, and then told he would find it impossible to draw it away, the mere idea was sufficient to paralyze his volition, the whole muscles became rigid, and he looked with astonishment at his condition; but the moment I said now the attraction is gone, and his hand will separate, such results followed. Moreover, now that his finger was a little withdrawn, by simply saying confidently that it would now be found that he could not touch the wire, as it would repel him, the idea once more paralyzed his volition, and he again manifested his incapacity, and in spite of his anxious, but misdirected efforts, there he remained fixed as a statue. On hinting that now the influence was suspended, the hand and arm became limber, when I told another person watching the experiment that now he would find the hand irresistibly drawn to the wire; and such result was presently manifested. No one had touched this wire for hours; it was merely a piece of bent brass wire which was lying loosely and projecting from the chimney-piece. This power seems to have been understood by Virgil, when he said—

‘*Possunt, quia posse videntur.*’

“In like manner, having intimated to a friend the remarkable vividness of this patient’s imagination, implicit belief and credulity, which rendered him liable to believe that he had an ocular perception of an external change, according to whatever idea might be suggested to him by others, I requested this friend, when we went into the room, to look at the end of the above wire at the same time with the patient, and that the former should pretend to me, when asked what coloured flame she saw emanating from it, to give a new idea at each inquiry. By this mode the patient caught the ideas suggested, having no notion that he was deluded in the way indicated. He left with the full conviction of the physical reality of all he had seen and described; and he has manifested like phenomena as frequently as he has been so tested.

“I have detailed the above case so much at length, because it is a very good type of a class of patients to be met with, who readily become the dupes of suggestions, in the manner presently to be explained, without the least desire to deceive others, or the most distant idea that they are themselves deceived. I have proved all I have advanced by so many concurrent examples, with individuals of the utmost probity and competency to describe their feelings, that there can be no doubt of the facts.

“But not only may patients, in the waking state, be made to believe that they see various forms and colours, and perceive variable sensible impressions and irresistible powers, drawing, repelling, or paralyzing them, from a strong mental impression changing the physical action of the organ or part usually engaged in the normal manifestation of such function; but I have, moreover, ascertained that the same influence may be realized in respect to sound, smell, taste, heat, and cold,—so that suggested ideas and concentration of consciousness are competent, with some individuals, to excite ideas, not merely of hearing vague sounds, but particular tunes, the smell of particular odours, and to discriminate particular tastes, and feel heat or cold. All this I have proved may be realized with some excitable subjects when they were wide awake; and when there was neither actual sound, nor odour, nor taste, in the situations and substances to which they were referred; and by merely asking what tune, what colour, what animal, or what substance, they perceived now, I clearly proved that ideas were thus excited in the minds of subjects, totally different from those existing in my own at the time. The subjects with whom I made these experiments were worthy of im-

placit credit as to their integrity in describing their feelings and belief; and the whole results, therefore, are attributable to the remarkable reciprocal actions of the mind and body on each other, to which I have so often referred. Indeed, one of the most beautiful examples I have had of these 'vigilant phenomena,' in respect to all the senses, occurred in the case of a gentleman of high classical and mathematical attainments, as well as in general science. He had seen no experiments of the sort before I tested himself.* On finishing my round of experiments with him, he begged of me to explain the rationale of what had occurred. I requested him to read what I had written on the subject, which he perused with great attention; after which he expressed himself perfectly satisfied that I had hit upon the true solution of the problem. Indeed, he was so kind as to authorize me to refer any one to him for a confirmation of the rationale I had given of the phenomena, as experienced by him in his own person when wide awake, and in the bright light of day.

"It is stated by Baron Reichenbach that the sensitive can uniformly detect water which has had the magnetic current passed through it, by having an open magnet brought over and in contact with the opposite sides of the glass in which the water is contained. I have tried this experiment in such a manner as was calculated to guard against various sources of fallacy which I knew were likely to mislead the unwary; such as the varied tone of voice or look of the experimentalist, when investigating the subject, and trying to elicit from the patient his candid opinion as to the qualities of each glass of water. The results were, that none of the patients tried could detect, either by smell, taste, or any other sensible effect, any difference between the magnetized and the unmagnetized water. At each trial I made use of four similar glasses, filled to the same height, two of which, by the contact to the glass of a powerful magnet for a minute or two, were magnetized, the other two not magnetized. The patients were all first tested in this way when awake, and then when asleep. Magnetizing by passes, or breathing on the water, I should not consider a fair experiment, and for this reason, that the halitus of the breath, or from the skin, might very readily be detected by a highly sensitive patient, by smell, and probably also by taste. I have met with a patient who

* When testing this gentleman, by requesting him to listen attentively and tell me what tune he heard from an object held near to, but not in close contact with his ear (it was merely a pencil-case), he named a well-known *cheerful* tune. Without saying a single word, I applied the finger and thumb of my other hand so as slightly to corrugate the integuments of the forehead, when he instantly said, "the tune is changed; it is Roslin Castle now." On my separating the fingers and thumb, so as to expand the integuments, he answered, that the music was lively again. These changes took place from the grave to the gay, and *vice versa*, as often as I made the corresponding changes on the integuments. If I named any particular tune which he would hear, without touching him, he immediately thought he heard the tune I had named.

In like manner, having asked him to tell me what *smell* he felt when the pencil-case was held to the nose, (it was a gold pencil-case, and therefore could have had neither smell nor taste,) he named an odour, but the moment I corrugated the integuments of the forehead, as before named, it changed for something disagreeable, and *vice versa* as often as such changes in the "Anatomy of Expression" were made. Similar delusions took place, likewise, in respect to taste, when he was requested to tell me what *taste* the pencil-case had under different circumstances, being agreeable with the expanded and elevated state of the integuments, and the reverse when they were contracted or depressed. Visual spectra, in like manner, could be rendered agreeable or disagreeable, bright or sombre, according to similar changes in the physical frame. The philosophical explanation of all this I have entered into pretty fully in my forthcoming treatise on hypnotism or nervous sleep; and it is on these principles that I have endeavoured to account, in a very simple and natural manner, for the excitation of the phenomena of mesmero-phrenology as they have been called, by touching certain parts of the scalp during mesmeric sleep, where all sources of fallacy are guarded against from auricular suggestion or previous knowledge of phrenology. According to my apprehension, exciting these phenomena in such manner, many of which are extremely interesting and beautiful, neither proves nor disproves the doctrines of phrenology, but just leaves that subject where we found it.

could very readily detect water so treated from that which had not, and I ascertained that she did so by smell.

"The extreme acuteness of the organs of special sense, under certain circumstances, is well illustrated in certain states of disease, and by what is realized in the feats of some savage tribes. They appear quite as exalted as anything I have met with, in the hypnotic or mesmeric state; and which has been sufficient to enable me to account, on natural principles, for what others have attributed to some new faculty or sense developed by their processes, and distinct from the ordinary organs of sense.

"However, I have never met with any case of accurate thought-reading, where the patients could generally and accurately interpret my unexpressed thoughts and desires regarding him, without some sensible sign to indicate my ideas to him; but, as already stated, I feel confident that there are many, who, from their excited and concentrated state of mind, and quickened senses, will catch ideas far more quickly than in the ordinary condition, who may be thus imposed upon, and excited to act by means of impressions received through the senses, which would entirely escape them in the ordinary condition.

"In consequence of the statement made in the third section, of the tranquilizing effect of causing highly sensitive patients to lie with the head towards the north, and the extreme discomfort of other directions of the body, in reference to the magnetic meridian, I caused a patient who had been long an extreme sufferer, and in whose welfare I felt the deepest interest, to submit to the trouble of such a change in the position of her bed, but, I am sorry to say, it was followed by no beneficial effect.

"That some of Baron Reichenbach's patients should have manifested the power of seeing luminous emanations in the dark, over the graves of the dead, more especially of those recently buried, I think admits of a more probable explanation than that propounded by the Baron. We know that during certain stages of decay of vegetable and animal matter, a phosphorescent appearance is manifested in the dark to ordinary vision, and, of course, it must be still more so to the highly sensitive. But there is another result of such organic decay still more powerfully felt by all, namely, its disagreeable odour. Few can escape the recognition of this, even in the bright light of day. Again: we are so much in the habit of associating visible or tangible forms with impressions which are conveyed to our minds through any of the organs of sense, that the blind are in the habit of expressing themselves as seeing such and such persons, whom they recognize approaching, merely by the sound of their voices, or tread of their steps and so on.

"In like manner a smell of any sort suggests corresponding ideas; and I have found hypnotic patients who recognized individuals of their acquaintance quite readily by smell, who always said, when asked how they knew who was present, "I see him or her," and, when the nostrils were stopped, thought the party had gone away. The sympathy which exists between the eyes and the nose is well proved by a strong light producing sneezing; and the converse of this is very natural, that a strong impression on the olfactory nerves might excite in the mind of a highly sensitive and imaginative person the idea of some visible appearance. This will account for the ghost-story quite as readily as the theory of the Baron, and will be found more generally available, as few people are so constituted as to be able to pass through such places without being painfully reminded, through their olfactory organs, that they are treading on the mortal remains of friends departed.

"But I may be met with the objection to my arguments by an appeal which has been made to the Daguerreotype, (a purely physical fact,)—which could not be influenced by mind,—for an experiment has been recorded by Baron Reichenbach, where, by the mere exposure of a sensitive plate in a box with a magnet, all light being excluded, an impression had been made, as if it had been exposed to the full influence of light, which did not happen, when another plate was so confined without the magnet. It appeared to me that such an important deduction ought not to have been arrived at, from one or two experiments of such a ticklish nature; and more especially so, when the iodized plates were so long kept before being exposed to the mercurial vapour; for it was natural to expect some chemical change might take place with them irrespective of light. I have repeated these

experiments with nine plates, prepared at different times with the greatest care by Mr. Akers, the patentee of the Manchester photographic gallery, (one of the most correct professors of his art,) and the experiments varied so as to guard against error, by mutual correction. The experiments have been tried by close and free exposure of three plates to the poles of a powerful horse-shoe magnet, (originally of 80 lbs. lifting power, but somewhat reduced from use,) and of other three similarly situated, only with two sheets of black paper interposed so as to intercept the rays of light, if any were emitted from the magnetic poles, and another was enclosed in a box at a distance from the magnet, and all kept from 66 to 74 hours; but in no instance was there any appearance of them having been acted on by light,—the only change being such chemical changes as generally arise from keeping prepared plates for some time before being exposed to mercury. The latter process was also performed by Mr. Akers for the purpose of insuring greater accuracy from his daily practice of the art. Two other plates were enclosed in a camera and exposed at such a distance as must have given a picture of the poles of the magnet, and flames issuing from them—for the camera was adjusted to $4\frac{1}{2}$ times the distance of ordinary light, and one left 66 the other 35 $\frac{1}{2}$ hours—but no such indications manifested themselves. I think, therefore, that I am warranted in concluding that no light, capable of affecting an iodized plate, is given out at the poles of magnets, as alleged from the experiments referred to by Baron Reichenbach.*

"Having thus far investigated Baron Reichenbach's speculations, and proved the major propositions to be erroneous, as respects proving the phenomena he refers to as resulting from "a new imponderable," I consider it unnecessary to prosecute the subject in the minor details. I may, however, remark, that I can readily imagine, from the exalted sensibility of particular individuals, and their highly concentrative state of mind, that they may be competent to detect electric, calorific, and physical qualities of objects, which would escape the observations of themselves and others, when in the ordinary and less sensitive condition. And, again, whilst I deny that we have any satisfactory proof of this new imponderable, passing from the operator to the patient, as alleged, during the processes of the mesmerists, still I readily admit that the operator, for the reasons already assigned, of mental impression changing physical action, is very likely to feel an aura in his finger ends, the position, action, and mental direction, all tending to excite in them turgescence and increased sensibility. I can also easily conceive, that the passes, through their physical, electrical, and other effects, tending to draw the patient's attention to particular parts, thus exciting their functions, and withdrawing it from others, thereby depressing their functions, and especially if the patient expects such results to ensue from such processes, are very likely to be followed by such results, irrespective of any special influence being transmitted from the operator to the patient, of the nature alleged by Baron Reichenbach and others.

"The mesmerists, who have entertained the notion that the sleep and other phenomena occurring during their processes arose from a magnetic fluid, or some special influence issuing from their persons, and passing into that of the patient, of course hail these speculations of Baron Reichenbach as demonstrative proof of the correctness of their theory of mesmerism. Some of their patients having declared that they saw blue or variegated sparks passing from the fingers of the operator, when making passes in mesmerizing a patient, water, or other inanimate object; or that they saw a blue fluid, or one of still brighter hue, issuing from the eyes of the operator and darting towards them, when gazing fixedly for the purpose of mesmerizing; or that they perceived a luminous halo surrounding the head of a person engaged in deep thought, must have felt gratified by the announcement, considering it well calculated to confirm in their minds the notion of the physical entity of the agent. But, when those patients have further described that when the operator has been engaged in silently willing, for example, that a patient should be made to come towards him, there is seen by the patient, a stream of something passing from the head of the operator to that of the patient, like a rope, and that he not only sees this, but feels its influence as a rope, or innume-

* Mr. Dancer, the optician, kindly lent me apparatus, and saw and approved of my arrangements, as well adapted for the purpose.

rable threads drawing him irresistibly towards the operator, the entity must now appear fully confirmed. But again, when some of these subjects become, at length, so accomplished and susceptible as to be able to perceive these visible appearances in the wide waking state, it cannot be wondered at that those whose long-cherished opinions lay in that direction, should jump to the conclusion that now the point is fully and satisfactorily settled. Under such a combination of circumstances, individuals may be excused for overlooking what to others is a very obvious source of fallacy,—viz., the tendency of a continued fixed gaze to confuse the vision, and of a fixed idea and expectation to confuse and bewilder the mind.

"It is well known that the undue excitement of an organ disturbs the normal functions of such organ: and that in a state of fever, delirium tremens, and various morbid states of the nervous system, and even in the healthy state during dreaming, the patient imagines that he feels, and sees, or hears all sorts of forms, colours, sounds, &c. We do not, on that account, subscribe our belief in the reality of the objects, or peculiar attributes he has seen, heard, or felt, or the imaginary feats he has accomplished. In this case we estimate the phenomena as mental and morbid delusions; and such I apprehend ought to be our conclusion in reference to these extraordinary and startling allegations.

"Inasmuch as patients can throw themselves into the nervous sleep, and manifest all the usual phenomena of mesmerism, through their own unaided efforts, as I have so repeatedly proved by causing them to maintain a steady fixed gaze at any point, concentrating their whole mental energies on the idea of the object looked at; or that the same may arise by the patient looking at the point of his own finger, or as the Magi of Persia and Jogi of India have practiced for the last 2400 years, for religious purposes, throwing themselves into their ecstatic trances by each maintaining a steady fixed gaze at the tip of his own nose; it is obvious that there is no need for an exoteric influence to produce the phenomena of mesmerism. The agency may be entirely personal or subjective, and in such cases as I have illustrated by extracts from Ward's History of the Hindoos and the Dabistan, through certain associations of ideas, such self-mesmerized patients can see and imagine as great, or indeed far greater wonders than are recounted by our most successful mesmerists of modern times, with the additional aid of their alleged mesmeric fluid. In proof of this I beg to refer to my paper in the Medical Times, page 272, vol. xi. The great object in all these processes, is to induce a habit of abstraction or concentration of attention, in which the subject is entirely absorbed with one idea, or train of ideas, whilst he is unconscious of, or indifferently conscious to, every other object, purpose, or action.*

"I had long been familiar with the fact, that during a certain stage of hypnotism,

* From careful observation, I feel convinced that the principal differences between nervous and common sleep, consist in the state or condition of the mind, and the physical effects which flow therefrom. In proof of this and the proposition above referred to, I beg to refer to the fact that I never yet succeeded in hypnotizing an idiot; for the very obvious reason that there was not a sufficient amount of intelligence to enable me to fix their attention. However, I have frequently succeeded in inducing the sleep in ordinary cases of insanity, and monomania, and in several instances with decided advantage. In some by restoring refreshing sleep which had been long absent, in others by exciting in their minds during the sleep, antagonist ideas to those which constituted their chief delusion. Fixing the attention through visual sensation as specially indicated in my little treatise on Hypnotism, is the most rapid and certain mode of inducing the state of nervous sleep, but the patient may be affected, as the blind are, by closing the eyes and keeping his mind fixed on some imaginary object or idea. After the impressibility has been stamped on subjects which are naturally highly susceptible, they become liable to be affected entirely through mental impression, belief, and habit,—that is to say, they will become affected from any visible process which they believe intended and capable of producing the effect, or even where no process whatever is in operation, if they only imagine something is being done at a distance to throw them into the sleep, they will become affected through the mere force of this mental impression and belief. This seems to be a grand source of fallacy with many who allege that they can affect patients at a distance, through mere volition or secret passes, occasional coincidences being exalted by them into a positive law.

patients may be made to give various manifestations, or declarations of their feelings and emotions, according to previously existing ideas, or suggestions imparted to them during the sleep; and, moreover, that such associations once formed, were liable to recur ever after, under a similar combination of circumstances. As occurs in ordinary dreaming, they seem generally at once to adopt the idea as a reality, without taking the trouble of reasoning on the subject as to the probability of such ideas being only imaginary; and their extreme mobility at a certain stage of the hypnotic state, renders them prompt with their corresponding physical response. In proof of this, and how readily those inattentive to these facts may misapprehend what they see realized in such cases, I beg to submit the following interesting illustration. When in London lately, I had the pleasure of calling upon an eminent and excellent physician, who is in the habit of using mesmerism in his practice, in suitable cases, just as he uses any other remedy. He spoke of the extraordinary effects which he had experienced from the use of magnets applied during the mesmeric state, and kindly offered to illustrate the fact on a patient who had been asleep all the time I was in the room, and in that stage, during which I felt assured she could overhear every word of our conversation. He told me, that when he put the magnet into her hands, it would produce catalepsy of the hands and arms, and such was the result. He waited the hands and the catalepsy ceased. He said that a mere touch of the magnet on a limb would stiffen it, and such he proved to be the fact.

"I now told him, that I had got a little instrument in my pocket, which, although far less than his, I felt assured would prove quite as powerful, and I offered to prove this by operating on the same patient, whom I had never seen before, and who was in the mesmeric state when I entered the room. My instrument was about three inches long, the thickness of a quill, with a ring attached to the end of it. I told him that when put into her hands, he would find it cataleptize both hands and arms as his had done, and such was the result. Having reduced this by wafting, I took my instrument from her, and again returned it, in another position, and told him it would now have the very reverse effect—that she would not be able to hold it, and that although I closed her hands on it, they would open, and that it would drop out of them, and such was the case,—to the great surprise of my worthy friend, who now desired to be informed what I had done to the instrument to invest it with this new and opposite power. This I declined doing for the present; but I promised to do so, when he had seen some further proofs of its remarkable powers. I now told him that a touch with it on either extremity would cause the extremity to rise and become cataleptic, and such was the result; that a second touch on the same point would reduce the rigidity, and cause it to fall, and such again was proved to be the fact. After a variety of other experiments, every one of which proved precisely as I had predicted, she was aroused. I now applied the ring of my instrument on the third finger of the right hand, from which it was suspended, and told the doctor, that when it was so suspended, it would send her to sleep. To this he replied, "it never will;" but I again told him that I felt confident that it would send her to sleep. We then were silent, and very speedily she was once more asleep. Having aroused her, I put the instrument on the second finger of her left hand, and told the doctor that it would be found she could not go to sleep, when it was placed there. He said he thought she would, and he sat steadily gazing at her, but I said firmly and confidently that she would not. After a considerable time the doctor asked her if she did not feel sleepy, to which she replied "not at all;" could you rise and walk? when she told him she could. I then requested her to look at the point of the fore-finger of her right hand, which I told the doctor would send her to sleep, and such was the result; and, after being aroused, I desired her to keep a steady gaze at the nail of the thumb of the left hand, which would send her to sleep in like manner, and such proved to be the fact.*

"Having repaired to another room, I explained to the doctor the real nature and

* The doctor here alleged that I had sent the patient to sleep by my *will*. This assertion, however I was enabled to refute; for I had been sufficiently *clairvoyant* to foresee what he would suppose, and to meet this difficulty had *willed* that she should *not go to sleep*.

powers of my little and apparently magical instrument,—that it was nothing more than my portmanteau-key and ring, and that what had imparted to it such apparently varied powers was merely the predictions which the patient had overheard me make to him, acting upon her in the peculiar state of the nervous sleep, as irresistible impulses to be affected, according to the results she had heard me predict. Had I predicted that she would see any flame, or colour, or form, or substance, animate or inanimate, I know from experience that such would have been realized, and responded to by her: and that, not from any desire on her part to impose upon others, but because she was self-deceived, the vividness of her imagination in that state, inducing her to believe as real, what were only the figments of fancy, suggested to her mind by the remarks of others. The power of suggestions of this sort also, in paralyzing or energizing muscular power is truly astounding; and may all arise in perfect good faith with almost all patients who have passed into the second conscious state, and with some, during the first conscious stage; and with some weak-minded, or highly imaginative or credulous and concentrative people, even in the waking condition. The latter constitutes that class of subjects who manifest what are called the “vigilant phenomena.” The true cause of these “vigilant phenomena” is not a physical influence from without, but a mental delusion from within, which paralyzes their reason, and independent volition, so that for the time being they are mere puppets in the hands of another person by whom they are irresistibly controlled, so that they can only see, or hear, or taste, or feel, or act, in accordance with his will and direction.* They have their whole attention fixed on what may be said or signified by this alleged superior power, and consequently perceive impressions through the excited state of the organs of sense, called into operation, which they could not perceive in their ordinary condition; and this sort of clairvoyance or thought-reading, the mesmerists attribute to some special influence, such as the new imponderable of Reichenbach. So soon as such patients can be made to believe that, in the waking state, the evidence of their senses is more trustworthy than mere ideal or suggested impressions; and that they can really exercise their own independent powers in opposition to the alleged power of the will of another, through his auricular suggestions or passes, and other manœuvres, it will instantly be found that the spell is broken, and that rational beings can no longer be magnetically tied together, or to chairs, or tables, or the floor; or made to see an object of every colour and hue, or metamorphosed into every nature, form, or creature the operator may incline and indite. It may have been interesting enough to have demonstrated that the human mind could be so subjugated and controlled; but, as I have formerly said, I do not consider the continual repetition of such experiments in the waking state, as at all proper, or free from the danger of throwing the faculties of the mind of such subjects into a permanently morbid condition.”

* Their minds are entirely engaged with a single idea, or train of ideas; actively alive to all which bears upon this, but, for the time being, dead to all else, as we continually see verified in cases of deep mental abstraction, and even during sleep, when the slightest impression bearing on certain points may be perceived, whilst intense impressions of any other relation may pass unheeded.